



STATE OF DELAWARE  
EXECUTIVE DEPARTMENT  
OFFICE OF  
STATE PLANNING COORDINATION

February 14, 2005

Sandy Reynolds  
Town of Frederica  
P.O. Box 294  
Frederica, DE 19946

RE: PLUS review – PLUS 2005-01-09; Town of Frederica Land Development Ordinance

Dear Ms. Reynolds:

Thank you for meeting with State agency planners on January 26, 2005 to discuss the proposed plans Town of Frederica Land Development Ordinance.

Please note that changes to the ordinance, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting.

This office has received the following comments from State agencies:

**Office of State Planning Coordination – Contact: Herb Inden 739-3090**

The Office of State Planning compliments the Town on a well prepared document. We are particularly impressed with the inclusion of the AO district with its one dwelling unit per 20 acres of land proposal. The State feels that this could serve as a model for other jurisdictions interested in preserving agricultural lands.

**State Historic Preservation Office (SHPO) – Contact: Anne McCleave 739-5685**

The DSHA commends the Town of Frederica for taking the steps necessary to protect their historic and cultural resources. They are also happy that the Town is interested in expanding the National Register Historic District boundaries, thereby protecting more

resources. This ordinance establishes a Historic District Overlay zone, which is the first step towards implementing protection for the historic properties.

The following are some suggestions to improve the ordinance:

- 1) State the purpose of the Historic District Overlay. For example, to protect Frederica's architectural and archaeological resources, preserve the town's small-town feeling, etc. . . .
- 2) p.38, item I.4.d. Be more specific on the characteristics the Commission will be evaluating, for example: "When reviewing projects in the historic district the Planning Commission shall make a finding that the project in question is consistent with the historic character of the district, and the specific location and/or structure that is the subject of the ~~development~~ (historic district review application?) application. The historic character includes: architectural style, design, height, bulk, setbacks, arrangement, location and materials."
- 3) p. 38, item I.4.b. – This section allows the Historic District Review to be combined with other reviews. We understand the desire for this, such as the ease of reviews and it may be less time consuming. However, we are worried that the Historic District Review could get lost within the other reviews and not reviewed appropriately. In other words, there could be a risk that the Commission might be looking at the end product more than the existing site or historic district. Therefore, we suggest that these reviews be separate. There should be a separate Historic District Review Application form and process.
- 4) p.38, item I.4.d(ii) – Add the underlined: The Secretary of the Interior's Standards for Rehabilitation and criteria relating to the treatment. . . .  
As a side note: the following is a link to the *Standards for Rehabilitation* – the members of the Planning Commission should receive a copy of this and become familiar with the Standards:  
<http://www.cr.nps.gov/hps/tps/tax/rehabstandards.htm>.
- 5) p.38, item I.4.e. – Add the underlined: "...in regards to scale, mass, building placement, architectural treatment, height, materials, style, setbacks."

Next steps to take:

1. Design Standards and Guidelines. Develop design standards and guidelines for the Historic Overlay Zone. This would be a separate document and one that is very important. Based on the *Secretary of the Interior's Standards for Rehabilitation*, it would be customized for Frederica's historic district. It would describe the district's architectural styles, setbacks, heights, etc., and include more specific guidelines from which the Commission would review projects. The Design Standards would provide the Commission the "muscle" to make their

determinations/approvals. So if anyone were to appeal the Commission's decision, the body reviewing the appeal would look to the Design Standards and Guidelines when deciding whether the Commission reviewed appropriately. Dover's Design Guidelines is a good example.

2. Historic Review Board. Most historic district ordinances establish a Historic Review Board who reviews construction projects in the historic district and zone, recommends and nominates properties for national and local historic registers, promotes the town's history, participates in the development of historic documents (e.g. Design Standards), etc. The members usually consist of professionals from architecture, history, preservation, planning, or other similar fields, as well as citizens from the general public.

Minor corrections:

p. 38, item I.4.c. – this paragraph has been mistakenly included in paragraph b. Please insert a paragraph return.

p. 38, item I.4.e. – add setbacks. "...in regards to scale, mass, building placement, setbacks, and architectural treatment."

p. 39, item I.4.f. – the paragraph ends with: "...and give the applicant." Is this the complete sentence?

p.71, Article 15. Architectural Design Standards. It is not clear whether these standards are for new construction outside of the Historic District Overlay Zone or for any new construction taking place within Frederica, including the historic district. Please clarify that it is only for new construction outside of the Historic Overlay Zone. The Historic Overlay Zone should have its own architectural design standards.

p. 37, item D.9. – this section states that no manufactured homes shall be permitted in the Historic District Overlay. It might be helpful to also include this statement under the Historic District Overlay Zone, section I.

The following are good sources for the Town while they are expanding their historic district protections:

- 1) Contact Robin Bodo in our office, 302-739-5685, about amending the National Register Historic District boundaries.
- 2) Contact Madeline Dunn at State Museums 302-739-5316, about public outreach/education for the Frederica Historical Society.
- 3) Preservation Delaware, Inc., Trent Margrif, executive director, 302-651-9617. This is the statewide non-profit. It can help Frederica Historical Society and well as the Town

of Frederica with information regarding grants from such organizations as the National Trust for Historic Preservation. One grant the Town might be interested in is the Hart Family Fund for Small Towns, which purpose is to assist small town preservation and revitalization initiatives around the country, with a focus on towns with populations of 5,000 or less. Here's a link that briefly describes the grant: <http://www.cttrust.org/index.cgi/7369>. Mr. Margrif and the Northeast Regional Office of the National Trust for Historic Preservation (contact Mr. Adrian Fine 215-848-8033) can help with questions regarding this and other grants available.

- 4) The Town may also want to consider strengthening their local historic preservation efforts by "achieving Certified Local Government (CLG) status from the National Park Service (NPS). NPS and State governments, through their State Historic Preservation Offices (SHPOs), provide valuable technical assistance and small matching grants to hundreds of diverse communities whose local governments are endeavoring to keep for future generations what is significant from their community's past. In turn, NPS and States gain the benefit of local government partnership in the national historic preservation program. Another incentive for participating in the CLG program is the pool of matching grant funds SHPOs set aside to fund CLG historic preservation subgrant projects--at least 10% of the State's annual Historic Preservation Fund (HPF) grant allocation. Grant funds are distributed through the HPF grant program, administered by NPS and SHPOs." (taken from the National Park Service web site: <http://www.cr.nps.gov/hps/clg/>.) For more information on the CLG program, contact Robin Bodo at 302-739-5685.
- 5) Other towns' preservation ordinances and design guidelines to reference: Dover ordinance and design guidelines are good examples (as you have already referenced); Odessa has a preservation ordinance and is currently developing design guidelines; Lewes has done a lot recently with a preservation ordinance and review board, and are looking to become a Certified Local Government.

**Department of Transportation – Contact: Bill Brockenbrough 760-2109**

DelDOT supports the proposed ordinance in concept and in general. They also support the AO zoning along Delaware Route 1 in particular because it is consistent with the Corridor Capacity Preservation Program. Any development along Delaware Route 1 will have to have other access.

- 1) As DelDOT understands it, newly subdivided lots would not, in any way, be pre-approved for development. Each lot would require a single-family development plan. They do not oppose such an arrangement, but the ordinance should make that clear.
- 2) In Section 10-1E5, there is a requirement that "Any fence installed in the rear yard of a townhouse unit shall have a gate allowing access to the alley..." It is

suggested that this requirement should be extended to all dwellings with alley frontage.

- 3) Given the requirement for gates to the rear yards of townhouses and multi-family units, contained in Section 10-3B2, is the requirement for gates to the rear yards of townhouses, contained in Section 10-1E5, redundant?
- 4) As a general comment, the Town should look more closely at how definitions are treated. Examples of areas that could be improved.
  - a) Article 2 is set aside exclusively for definitions, but Sections 4-1A, 4-6, 5-1A., 5-2A, 5-3A, 5-4A, 5-5A, 7-3A, 13-3A, 13-4A, 13-5A, 13-7A, and 14-2A also provide definitions. The Town should consider collecting the material from all of those sections in Article 2.
  - b) On page 9, the definition of “Plat, Record” refers the reader to Section 4-1A. On page 10, the definition of “Record Plat” provides the same definition that is given in Section 4-1.
  - c) Preliminary Plan is defined in both Article 2 and Section 4-1A. The definition in Article 2 is longer.
- 5) In Section 6-2, the permitted and accessory uses for each of the eight base zones are contained, respectively in Table 7-1 and Section 7-3. It would be efficient to refer the reader to those places once rather than eight times.
- 6) In Section 10-4C, there is a requirement that “Curbs and gutters shall have typical type III curb and gutter.” We recommend that this sentence be changed to read “Unless otherwise specified by the Town, curb and gutter shall be integral Portland cement concrete curb and gutter consisting of vertical curb with an integral gutter pan and conforming to the dimensions of Type 3 curb and gutter in the Delaware Department of Transportation’s Standard Construction Details. These drawings are available on the Internet at [http://www.deldot.net/static/business/const\\_details/index.html](http://www.deldot.net/static/business/const_details/index.html).
- 7) Section 12-6A1b specifies characteristics of acceptable street tree varieties. At the meeting, we agreed to provide a list of acceptable varieties. So that you might have the rest of our comments more promptly, I will provide that list separately.

At the meeting, Bill offered to provide a list of street trees used by DelDOT, which list the Town could incorporate in their code. I have since found that they do not maintain such a list. However, I have copied the following list from Appendix 3 of New Castle County’s Unified Development Code. Given that soil and climate conditions in Frederica and New Castle County are similar, this list should be suitable for Frederica as well.

Large trees (over 40 feet): should be planted 40 feet on center

Acer rubrum "Red Sunset"	Red Maple
Acer saccharum "Green Mountain"	Sugar Maple
Celtis occidentalis*	Common Hackberry*
Gleditsia triacanthos "inermis"	Thornless Honey Locust
Platanus acerifolia	London Plane Tree (Liberty or Columbia varieties)
Quercus coccinea*	Scarlet Oak*
Quercus macrocarpa	Willow Oak
Quercus palustris*	Pin Oak*
Quercus rubra*	Northern Red Oak*
Quercus shumardii	Shumard Oak
Tilia cordata	Littleleaf Linden
Zelkova serrata	Japanese Zelkova

*Note: maples to be planted in a minimum 8 foot wide green strip, or, behind the sidewalk.*

Medium trees (30 to 40 feet): should be planted 30 feet on center

Acer campestre	Hedge Maple
Carpinus betulus	European Hornbeam
Carpinus caroliniana*	American Hornbeam*
Crataegus crusgalli inermis	Thornless Cockspur Hawthorn
Koelreuteria paniculata	Goldenrain Tree
Prunus serrulata "Kwanzan"	Kwanzan Cherry
Prunus sargentii	Sargent Cherry
Pyrus calleryana	Flowering Pear (Aristocrat or Redspire varieties)
Sophora japonica	Scholar Tree
Syringa reticulata	Japanese Tree Lilac

**The Department of Natural Resources and Environmental Control – Contact:  
Kevin Coyle 739-3091**

### **General Comment**

The inclusion of natural resource protections, particularly protection of existing trees and the inclusion of mandatory riparian buffers is appreciated and should be commended. That said, DNREC offers the following comments

## **Definitions**

There is no definition for open space. The definition of open space should include consideration for natural areas and recreational areas.

## **Chapter 4 – required information.**

Why are water resource protection areas not to be delineated on minor subdivision plans? Identification of these areas, even on small subdivisions, can help mitigate impacts to them.

As part of the subdivision process, habitat for rare and endangered species should be identified by contacting the DNREC Natural Heritage program for a review of their database. This information can help identify those areas in need of extra protection.

## **Pg 51 – B. Lot Design**

This section should include a clause that prohibits lot lines within designated open space, riparian buffer areas, wetlands, floodplains and easements.

## **12-1 Water Resource Protection Areas. Regulations Governing Development**

- A. **Wellhead Protection Areas.** Suggest adding the following language to encourage infiltration within wellhead protection areas: “Where possible, groundwater recharge shall be encouraged within the wellhead protection areas by replacing turf grass with low-maintenance cool or warm season grasses, shrubs and/or trees”
- B. **Excellent Recharge Areas.**
  - a. Development standards should include those mandated by Delaware’s Source Water Protection Law and recommended by the Source Water Protection Guidance Manual, including the following:
    - i. Designate excellent recharge areas as open space.
    - ii. Limit impervious cover to no more than 20% within the excellent recharge area
    - iii. Encourage use of vegetation that increases infiltration and innovative technologies that increase infiltration.

## **12-2. Drainage**

A.2. This section should also specify that lot lines shall not include any designated waterway buffer zones or drainage easements.

B. This section could also include language encouraging infiltration of water and adequate drainage through landscaping, rain gardens, rain barrels, roof gardens and the like.

## **12-6 Landscaping**

A. Trees along dedicated streets: This section should clearly indicate that tree species selected for planting shall not be invasive or nuisance species.

B. Protection and Retention of Large Trees: Consider adding the following text: “Lot lines should exclude wooded areas where feasible to promote habitat protection, groundwater recharge and natural drainage”

B.3. This should begin a new section, “C” Landscaping within Lots.

Consider including the following sections:

C. Landscaping within lots

1. The developer shall plant at least two trees on each new lot. Selected trees shall be species that can generally be expected to thrive in the area and are not considered invasive or nuisance species. These trees shall be in place before the time that a certificate of occupancy is issued for the structure on that lot.
2. Rain gardens, rain barrels and alternatives to traditional landscaping practices are encouraged to increase water infiltration to groundwater and drainage, improve air quality and increase habitat for birds and wildlife.

D. Landscaping in Open Space

1. Reforestation and natural landscaping is encouraged dedicated open space, particularly in passive open space, RBAs, flood zones, resource protection areas etc.

**12-7 – Riparian Buffer Areas.** The intent of this section is appreciated; however, in order to preserve and maintain RBAs, additional requirements will be necessary. Please consider the following:

A. Minimum Riparian Buffer Area Requirement

1. Riparian Buffer Areas are to be established and permanently protected within all new development.
2. A riparian buffer area shall extend a minimum of 100 feet past each top of bank for all waterbodies on site and/or 50 feet beyond the floodplain or wetland line, whichever is greater.
3. The riparian buffer area shall contain no lot lines, structures or infrastructure such as stormwater maintenance ponds. However, as appropriate, may contain walking trails.
4. The riparian buffer area shall be designated as open space and permanently protected via dedication to the town, deed restriction or conservation easement.



5. The riparian buffer, and other associated open space, shall be demarked with permanent markers to ensure against encroachment.

**B. Establishment and Maintenance**

1. Where native vegetation is not present, the RBA must be reforested with native species according to table 12-1.
2. No vegetation shall be removed from the RBA, except for removal of invasive and exotic species and hazardous trees.
3. A transition zone, consisting of scrub/shrub vegetation or low maintenance warm or cool season grass is encouraged between forested RBA and lot lines.
4. A maintenance plan for the RBA shall be established and a responsible party designated to implement the plan.

**12-8 Open Space**

For clarity, requirements for active open space should be separate from requirements for “passive open space” and dedicated natural areas. Also consideration should be given to specifying who will manage and maintain these areas?

For passive open space, consider the following:

1. Passive open space shall contain the following lands in any new development project:

- Riparian Buffer Zones
- Floodplains
- Wetlands
- Forested areas outside of lot lines
- Water Resource Protection Areas
- Drainageways and easements

2. Passive open space may also contain the following:

- Identified areas of Cultural resources
- Significant or important viewsheds or aesthetic features
- Unforested or grassland areas adjacent to other types of open space

3. Passive open space shall be permanently protected through dedication to the Town, deed restrictions or conservation easement.
4. Passive open space shall be demarked with permanent monuments to prevent encroachment by homeowners.
5. No structures, lot lines or infrastructure shall be allowed within passive open space, with the exception of walking trails.

6. A maintenance plan for the Open Space shall be established and a responsible party designated to implement the plan.

### Rare/Threatened/Endangered Species

A review of our database indicates that the following species and/or communities are at or adjacent to the areas designated as “Areas of Concern” on Map 7:

Scientific Name	Common Name	Taxon	State Rank	State Status	Global Rank	Federal Status
<i>Lampetra appendix</i>	American Brook Lamprey	Fish	S2		G4	
<i>Lechea mucronata</i>	Hairy Pinweed	Plant	S2		G5	
<i>Lycaena hyllus</i>	Bronze Copper	Butterfly	S2		G5	

**State Rank:** S1- extremely rare within the state (typically 5 or fewer occurrences); S2- very rare within the state (6 to 20 occurrences); B - Breeding; N - Nonbreeding; **State Status:** E – endangered, i.e. designated by the Delaware Division of Fish and Wildlife as seriously threatened with extinction in the state; **Global Rank:** G1 - imperiled globally because of extreme rarity (5 or fewer occurrences worldwide); G2 - imperiled globally because of great rarity (6 to 20 occurrences); G3 - either very rare and local throughout its range (21 to 100 occurrences) or found only locally in a restricted range; G4 - apparently secure globally but uncommon in parts of its range; G5 - secure on a global basis but may be uncommon locally; T\_ - variety or subspecies rank; Q – questionable taxonomy; **Federal Status:** LE – endangered, i.e. designated by the U.S. Fish and Wildlife Service as being in danger of extinction throughout its range; LT – threatened, i.e. designated by USFWS as being likely to become endangered in the foreseeable future throughout all or a significant portion of its range; PS – proposed status.

To avoid impacts to the species listed in the table above, please contact our office if there are plans to develop those ‘Areas of Concern’. At that time we can determine if the proposed activity will likely impact those species and make recommendations on methods to avoid impacts. We may also request a site visit to areas where we have not previously surveyed.

There is an active Bald Eagle nest just to the east of the ‘Area of Concern’ that is located Northeast of town and this portion of the Murderkill River serves as a foraging and resting area for this species. Activities that affect the water quality or riparian habitat along the river could impact this federally protected bird. There are also several rare plant species located south of town within the Murderkill River system that could be detrimentally impacted by sedimentary inputs to the river. In addition, a large portion of the ‘Areas of Concern’ are within the Murderkill State Natural Area. For further information about this natural area, please contact Rob Line, Natural Areas Program Manager, at (302) 739-3423.

### Water Supply

1. It is hard to evaluate the adequacy of the current water supply without any population growth projections, annexation plans or known development projects (although this may have been done in an earlier document).
2. The 300-foot open-space-only setback is not being applied to the Town’s current wells, which are located in downtown areas.

3. Even without population projections, it is safe to assume that at least one of their two wells will have to be replaced at some point (the older one is 37 years old). Where will an open-space area of 300-foot radius be found? The Town's extensive open space is located in the tidal marshes around the Murderkill.

### **Water resource Protection Areas**

Section 12-1, (A), item 2. It seems that there are some words missing in the first sentence. The sentence is confusing and reads, "The storm water system's discharge to wellhead WRPA's shall be by sheet....?"

Section 12-1, (B). The reference is incorrect. The reference should be: Delaware Geological Survey; Open File Report No. 34, entitled "Methodology For Mapping Ground-Water Recharge Areas In Delaware's Coastal Plain," dated August 1991.

### **TMDLs**

Additionally, some mention should be made in this ordinance of Total Maximum Daily Loads (TMDLs). TMDLs are the amount of pollution that a water body can assimilate and still achieve water quality standards. Given the fact that land use and water quality are strongly connected, development in and around Frederica must be conducted with respect for the environment. Since protection of the environment is ultimately tied to the achievement of the Federal TMDL nutrient reduction(s), all levels of government should be unified and involved to make sure these reductions are achieved.

Therefore, it is strongly recommended that the following statement be inserted within the environmental protection standards portion (section 12.?) of the ordinance: With the adoption of Total Maximum Daily Loads (TMDLs) as a "nutrient-runoff-mitigation strategy" for reducing nutrients in the Murderkill subwatershed, reduction of nitrogen and phosphorus loading from all land use activities within the town of Frederica will be mandatory. A TMDL is the maximum level of pollution allowed for a given pollutant below which a "water quality limited water body" can assimilate and still meet water quality standards to the extent necessary to support use goals such as, swimming, fishing, drinking water and shell fish harvesting. Although TMDLs are authorized under federal code, states are charged with developing and implementing standards to support those desired use goals. The Jurisdictional authority for attaining these use goals will fall under the auspices of Section 11.5 of the State of Delaware's Surface Water Quality Standards (as amended August 11, 1999), and will be achieved via nutrient reductions referred to as "pollution control strategies."

Nutrient reductions prescribed under TMDLs are assigned to those watersheds or subwatersheds on the basis of recognized water quality impairments. In the Murderkill, the primary source of water quality impairment is associated with nutrient runoff from agricultural and/or residential development. In order to mitigate the aforementioned impairments, a TMDL reduction level of 30 and 50 percent will be required for nitrogen and phosphorus, respectively. Any proposed development within the Murderkill

subwatershed will have to demonstrate (via scientifically-defensible nutrient budget calculations) that said development will reduce nutrients to the level specified by the individual or collective TMDL(s).

Finally, it is recommended that the following be inserted in within the wastewater portion (section 11-4) of the ordinance: “Individual residential or community on-site sewage treatment and disposal systems sited in a watershed with an established Total Maximum Daily Load (TMDL) shall be designed and installed in accordance with the nutrient load reductions prescribed by the TMDL, or they shall use the best available technologies to achieve those required nutrient load reduction(s).” For further edification, Kent County has adopted similar comments/recommendations within their subdivision and land development ordinance.

**State Fire Marshal’s Office – Contact: John Rossiter 739-4394**

The DE State Fire Marshal’s Office has the responsibility to review all commercial and residential subdivisions for compliance with the DE State Fire Prevention Regulations. This Agency asks that a MOU be established between the DE State Fire Marshal’s Office and the Town of Frederica Land Planning Commission. The Commission will be issuing final approvals on commercial and residential subdivisions. The State Fire Marshal’s Office would be issuing approvals much like DelDOT, Kent Conservation, and DNREC. This Agency’s approvals are based on the DE State Fire Prevention Regulations only.

On page 52 Section 9-5 B #4: add – Office of State Fire Marshal approval.

On page 54 Section 10-1 B #4: the current statement ‘Cul-de-sac streets should not exceed 300’ feet (typo) in length’ should be reworded to either “Cul-de-sac streets shall not exceed 300 feet in length” or “Cul-de-sac streets should not exceed 300 in length. However, dead-end streets over 300 feet in length shall meet the minimum requirements set forth in the Delaware State Fire Prevention Regulations.”

On page 54 Section 10-1 B #5: reword – Fire department access and fire lane layout shall be provided in accordance with the Delaware State Fire Prevention Regulations

On page 55 Section 10-3 A #1: add – in accordance with the Delaware State Fire Prevention Regulations.

Some of the compliance issues are listed below. At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation (DSFPR):

- a. **Fire Protection Water Requirements:**
  - Water distribution system capable of delivering at least 1500 gpm for 2-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers. (Mercantile)

- Water distribution system capable of delivering at least 1000 gpm for 1-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers. (Assembly and Townhouses)
- Where a water distribution system is proposed for single family dwellings it shall be capable of delivering at least 500 gpm for 1-hour duration, at 20-psi residual pressure. Fire hydrants with 1000 feet spacing on centers are required. (One & Two- Family Dwelling)
- Where a water distribution system is proposed for the site, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.

b. **Fire Protection Features:**

- All structures over 10,000 Sq. Ft. aggregate will require automatic sprinkler protection installed.
- Buildings greater than 10,000 sq.ft., 3-stories or more or over 35 feet, or classified as High Hazard, are required to meet fire lane marking requirements.
- Show Fire Department Connection location (Must be within 300 feet of fire hydrant), and detail as shown in the DSFPR.
- Show Fire Lanes and Sign Detail as shown in DSFPR
- For townhouse buildings, provide a section / detail and the UL design number of the 2-hour fire rated separation wall on the Site plan.

c. **Accessibility**

- All premises which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. This means that the access road to the subdivision from (Road Name Here) must be constructed so fire department apparatus may negotiate it.
- Fire department access shall be provided in such a manner so that fire apparatus will be able to locate within 100 ft. of the front door.
- Any dead end road more than 300 feet in length shall be provided with a turn-around or cul-de-sac arranged such that fire apparatus will be able to turn around by making not more than one backing maneuver. The minimum paved radius of the cul-de-sac shall be 38 feet. The dimensions of the cul-de-sac or turn-around shall be shown on the final plans. Also, please be advised that parking is prohibited in the cul-de-sac or turn around.
- If the use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.

d. **Gas Piping and System Information:**

- Provide type of fuel proposed, and show locations of bulk containers on plan.

e. **Required Notes:**

- Provide a note on the final plans submitted for review to read “ All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations”
- Proposed Use
- Alpha or Numerical Labels for each building/unit for sites with multiple buildings/units
- Square footage of each structure (Total of all Floors)
- National Fire Protection Association (NFPA) Construction Type
- Maximum Height of Buildings (including number of stories)
- Townhouse 2-hr separation wall details shall be shown on site plans
- Note indicating if building is to be sprinklered
- Name of Water Provider
- Letter from Water Provider approving the system layout
- Provide Lock Box Note (as detailed in DSFPR) if Building is to be sprinklered
- Provide Road Names, even for County Roads

Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded from our website: [www.delawarestatefiremarshal.com](http://www.delawarestatefiremarshal.com), technical services link, plan review, applications or brochures.

**Department of Agriculture - Contact: Mark Davis 739-4811**

Overall Comments

The Delaware Department of Agriculture and the Delaware Forest Service commends the town and its residents for their efforts to revise their comprehensive plan and land-use ordinances. However, the Delaware Department of Agriculture Forest Service reserves the right to continue to comment on projects east of SR-1 / US113. Both DDA the Forest Service supports the goals of the state’s green infrastructure policies and the Livable Delaware Initiative and encourages thought and consideration to land-use activities east of this major highway. We also encourage the town to work closely with the Agricultural Museum to further the historical and cultural significance of the town, the Hall Family and the surrounding area. We also encourage the town to further refine ordinances to require that adjacent new developments capture the look and feel of what is best and unique in Frederica. DDA’s planning section staff looks forward to working with the town to further refine agriculturally based land use ordinances to ensure the presence of and benefits from some working open space within the town or bordering the town. DDA is especially encouraged by the proposed AO zoning district because it offers one dwelling unit per 20 acres of land.

Review of Tree Preservation Section of Proposed Ordinance

The Delaware Department of Agriculture Forest Service supports the section and has no objections at this time. The Forest Service is pleased to offer its services to support these and other efforts within your community. To learn more please contact our offices at (302) 698-4500.

**Public Service Commission - Contact: Andrea Maucher 739-4247**

Any expansion of natural gas or installation of a closed propane system must fall within Pipeline Safety guidelines. Contact: Malak Michael at (302) 739-4247.

**Delaware State Housing Authority – Contact Karen Horton 739-4263**

DSHA notes that the Frederica Land Development Ordinance promotes growth and development in areas most suitable for development throughout the Town while preserving open space and historical and cultural resources. The Ordinance also promotes sidewalks and interconnectivity of streets to promote walkable communities.

**Delaware Emergency Management Agency – Contact: Don Knox 659-3362**

No significant impact to public safety is foreseen by implementation of this project. As the Town of Frederica annexes additional land and increases the population base, it is important to make sure that Public Safety issues such as adequate police, fire, medical coverage are addressed.

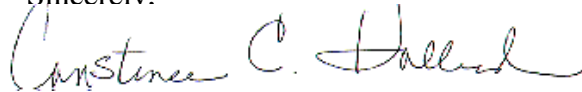
**Department of Education – Contact: Nick Vacirca 739-4658**

School sites should be considered as a conditional use of all zoning areas.

**Before adopting the Land Development Ordinance, please responds to this letter, noting whether changes were made to the ordinance in response to this letter.**

Thank you for the opportunity to review this project. If you have any questions, please contact me at 302-739-3090.

Sincerely,

A handwritten signature in blue ink that reads "Constance C. Holland". The signature is fluid and cursive, with the first name being the most prominent.

Constance C. Holland, AICP  
Director

CC: Kent County